

Local Hazard Mitigation Plan ANNEX

East Bay Regional Park District

Introduction

The purpose of this annex is to include the East Bay Regional Park District (EBRPD) into the Associations of Bay Area Governments' (ABAG's) regional Local Hazard Mitigation Plan (LHMP). EBRPD participation in this plan is voluntary, but necessary in order to be eligible for future Federal Emergency Management Agency (FEMA) mitigation funding.

EBRPD is a special district located in Alameda and Contra Costa Counties, California. The District has a total area of 95,000 acres in 65 different parks. This year, 2006, the District's total budget is \$139.6 million. The District employs 530 permanent personnel and 250 seasonal/temporary personnel. The District provides police and fire services on its parklands and assists local agencies with mutual aid.

The Planning Process

EBRPD has made serious efforts towards hazard mitigation by developing the Public Safety Policy Manual, which identifies appropriate procedures during emergencies. In the instance of natural disasters this manual directs control to the Emergency Operations Plan (EOP). EBRPD orchestrates annual Emergency Operations Command Center Training meetings that provide guidance on how to respond to an emergency within the boundaries of the EOP; from the initial onset, the response, to the cost recovery process. The EOP integrates planning from multiple jurisdictions, with content based upon the guidelines established by the State of California and the Federal Emergency Management Agency. Its distribution of tasks is consistent with California's Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS). Three SEMS training sessions have been successfully completed by EBRPD and EBRPD is planning to implement NIMS training.

EBRPD collaborates with surrounding agencies in the Hills Emergency Forum (HEF) as another act of hazard foresight. HEF brings together federal, state, and local agencies in the east bay hills for interagency fire preparedness planning. Their efforts seek to: facilitate the sharing of information on fire hazards in the east bay hills, be a forum for developing interagency consensus on fire safety standards and response, educate the public, and develop fuel reduction strategies. The forum meets monthly to develop consistency among the member agencies.

The District holds weekly Public Safety Command Staff meetings to review on-going dangers from natural and man made disasters within the district and to assess response capabilities. These meetings keep the staff aware of the condition the district is in and contribute to efficient response.

Additionally, all of the district facilities are subject to comprehensive risk safety inspection tours. All monitoring and safety tours are based on the District specific "Fire and Life Safety Inspection Form". A formal inspection on a two-year rotational basis is performed on all

facilities, while the primary sites are monitored annually. The tours examine and address susceptibility to man made and natural hazards.

Many of the activities conducted by the District were fed into the planning process for the multi-jurisdictional multi-hazard plan. The District participated in various ABAG workshops and meetings, including the general “kick-off” meeting and provided information on facilities within EBRPD that are viewed as “critical” to ABAG.

Key District staff met on two occasions to identify and prioritize mitigation strategies appropriate for EBRPD. Staff involved in these meetings included the Chief of Maintenance & Skilled Trades, Fire Marshal, Stewardship Manager, Chief Financial Officer/Controller, and Police Captain. At the first meeting EBRPD collaborated with the Hills Emergency Forum on August 25, 2004. The general priorities and appropriate EBRPD departments to handle them were identified. The second meeting occurred among EBRPD staff to establish “high” priorities and identify potential funding sources. EBRPD provided the opportunity for the public to comment on the mitigation strategies selected by EBRPD staff during open session at the EBRPD Board meeting on June 21, 2006. The EBRPD Board passed a resolution adopting the plan and strategies at that meeting on June 21, 2006. The adopted mitigation strategies will become an implementation appendix to this Safety Element.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, is a lists of nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought).

The District examined the hazard exposure of District **land** based on the information from ABAG. Of the 95,000 acres in the District,

- ◆ Earthquake faulting – 1,352 acres of land are in the Alquist-Priolo Fault Study Zones for fault surface rupture mapped by the California Geological Survey. Study Zones for the South Hayward (191.2 acres), North Hayward (168.4 acres), Calaveras (682.4 acres), Concord-Green Valley (9.48 acres), and Greenville (300.1 acres) faults occur on the District lands.
- ◆ Earthquake shaking – 40,695 acres are in the highest two categories of shaking potential, in large part because several faults run through the eastern portion of the District.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the District’s area. However, this hazard is viewed as similar to that posed by weather-related hazards.
- ◆ Earthquake liquefaction – 7,862 acres are in areas of moderate, high, or very high liquefaction susceptibility.
- ◆ Tsunamis – While tsunamis may be a hazard for some District properties, the mapping of the inundation area has not been completed at this time.
- ◆ Flooding – 8,620 acres are in the 100-year flood plain, while an additional 191 acres are in other flood-prone areas;

- ◆ Landslides – 37,430 acres are in areas of “many” or “mostly” existing landslides.
- ◆ Wildfires – 72,751 acres are subject to high, very high, or extreme wildfire threat, and 4,134 acres are in wildland-urban interface threat areas.
- ◆ Dam Inundation – 4,387 acres are subject to dam inundation.
- ◆ Drought – all 95,000 acres are subject to drought.

The District also examined the hazard exposure of **infrastructure** based on the information from ABAG. Of the 593 miles of roadway in the District,

- ◆ Earthquake faulting –A total of 25.8 miles of District roadway are in the Alquist-Priolo Fault Study Zones for fault surface rupture mapped by the California Geological Survey.
- ◆ Earthquake shaking – 294.9 miles of roadway are in the highest two categories of shaking potential.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the District’s area. However, this hazard is viewed as similar to that posed by weather-related hazards.
- ◆ Earthquake liquefaction – 72.1 miles of roadway are in areas of moderate, high, or very high liquefaction susceptibility.
- ◆ Tsunamis – While tsunamis may be a hazard for some District properties, the mapping of the inundation area has not been completed at this time.
- ◆ Flooding – 58.2 miles of roadway are in the 100-year flood plain, while an additional 3.2 miles are in other flood-prone areas.
- ◆ Landslides – 235.5 miles of roadway are in areas of “many” or “mostly” existing landslides.
- ◆ Wildfires – 457.0 miles of roadway are subject to high, very high, or extreme wildfire threat, and 46.6 miles of roads are in wildland-urban interface threat areas.
- ◆ Dam Inundation – 32.2 miles of roadway is in an area subject to dam inundation.
- ◆ Drought – is not a hazard for roadways.

Finally, the District examined the hazard exposure of the **three critical facilities** owned by the District: the police and EOC facility, the Tilden Corp Yard, and the headquarters building.

- ◆ Earthquake faulting –No critical facilities are in an Alquist-Priolo Fault Rupture Study Zone.
- ◆ Earthquake shaking – All three critical facilities are in the highest two categories of shaking potential.
- ◆ Earthquake liquefaction – None of the three critical facilities are in areas of moderate, high, or very high liquefaction susceptibility mapped by the U.S. Geological Survey.
- ◆ Landslides and earthquake-induced landslides – Only the Tilden Corp Yard is in a area of significant storm-related land sliding. This site is not mapped by the Seismic Hazard Mapping Program of the California Geological Survey as in an area of earthquake-induced landslide potential, however.
- ◆ Flooding – All three facilities are outside of both the 100-year flood plain and other flood-prone areas.
- ◆ Wildfires – The EOC/Police facility is in an area of high fire threat, while the Tilden Corp yard is in an area of very high fire threat and the headquarters facility is in an

area of moderate fire threat. The headquarters facility is in a Wildland-Urban Interface threat area, however, unlike the other two critical facilities.

- ◆ Dam Inundation – Only the headquarters facility is subject to dam inundation (from two separate dams).
- ◆ Drought – Drought, though a potential problem for District operations, is not fully assessed as part of this Local Hazard Mitigation Plan Annex. The District will be working with ABAG and other water supply agencies on this issue.

While the District has undertaken a number of general hazard prevention activities since the first Safety Element was prepared, the maps used are less detailed and not as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

Information on disasters declared in Alameda and Contra Costa Counties are at <http://quake.abag.ca.gov/mitigation/disaster-history.html>.

In spite of the areas of the District located in flood-prone areas, there are no repetitive loss properties on District properties based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>.

Drought, though a potential problem in the District, is not fully assessed. The District will work with ABAG and various water supply agencies on this issue.

The District plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities, which might result from any of the hazards previously noted. The ABAG Annex states that ABAG will be doing this work in 2005 through early 2006.

As these impacts are on a broad basis, the District has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking), flooding, wildfire, and landslides (including unstable earth) pose a significant risk for potential loss.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, East Bay Regional Park District staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at a meeting of the Stewardship Manager, Fire Chief, Chief of Maintenance and Skilled Trades, Grants Manager, Operations Manager, and Police Chief on January 10, 2005. At the meeting, all of the mitigation strategies were reviewed. The decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

When assigning priorities the District took into account the existing precautions that have already been taken. Preventative measures, such as under-grounding utilities for protection,

mitigating possible dangers from fire and windstorms, along with allowing the District to adjust priorities accordingly. Additionally, the District funds a full service 24 hours a day 7 days a week, 365 days a year Emergency Communications Center with on site power back up. With these precautions already in place EBRPD evaluated which areas to focus on to maximize funding and overall safety.

Within the District most of the high priority items are already addressed in existing programs, such as the fire management program. For those that are not, the District will be working to identify sources of funding.

These draft priorities were submitted to the District Board of Directors for review on April 18, 2006 where the public was provided with an opportunity to comment on them. The final strategies (as shown in the attached Table) will become an *Implementation Appendix* to the District's *Safety Element*.

The Plan Maintenance and Update Process

The General Manager will ensure that ***monitoring*** of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of the Emergency Operations Command Center Training meetings at least once a year. At the meeting department heads will focus on ***evaluating*** the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

The East Bay Regional Park District is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The General Manager will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the District again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including Contra Costa and Alameda County's Office of Emergency Services whom the District has maintained a long standing working relationship with through the Hills Emergency Forum. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The ***public*** will continue to be involved whenever the plan is updated, and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the District will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.